APPENDIX N ECONOMIC – FISCAL IMPACT ANALYSIS



ECONOMIC-FISCAL IMPACT ANALYSIS Rentschler Development, East Hartford, CT

Prepared Under Contract to:

BAYSTATE ENVIRONMENTAL CONSULTANTS

For:

STATE OF CONNECTICUT DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT

By:

AMS CONSULTING, LLC. Lafayette Square 350 Fairfield Avenue Bridgeport, Connecticut 06604



MEMORANDUM

August 28, 2006

TO: Steve Lecco, Baystate Environmental Consultants

FROM: Lawrence Kenney, Senior Vice President

RE: Economic - Fiscal Impact Analysis

Rentschler Development

East Hartford, CT

Pursuant to your request, we have prepared the following Economic-Fiscal Impact Analysis pertaining to the proposed redevelopment of a 650 acre site in East Hartford, CT.

The subject of this report is the projected economic and fiscal impact on the state and region resulting from the redevelopment of the Property for mixed use that includes office, R&D, retail, hotel, education, medical & sports facilities, dining & entertainment and housing.

This report is submitted to the Client subject to the following limiting conditions:

- 1. No responsibility is assumed for matters of a legal nature.
- 2. No responsibility is assumed for errors in information or determination of model structure and logic furnished by others and believed to be reliable at the time of compilation.
- 3. This Study is not intended to reflect the market or financial feasibility of developing the Subject Property under any of the development alternatives examined herein. Furthermore, no opinions either expressed or implied are provided herein with regard to the potential profitability of the proposed venture to its participants.

In conclusion, we are pleased to have been provided the opportunity to serve you in this capacity

Copyright © 2006 AMS CONSULTING, LLC

All Rights Reserved Unauthorized Duplication is Expressly Forbidden

NO RESPONSIBILITY IS ASSUMED FOR ERRORS IN INFORMATION FURNISHED BY OTHERS AND BELIEVED TO BE RELIABLE AT THE TIME OF COMPILATION.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	
EXECUTIVE SUMMARY	5
DEVELOPMENT PROGRAM	6
REMI MODEL DESCRIPTION	7
ECONOMIC IMPACT DEFINITIONS	8
ASSUMPTIONS	9
PROJECTED ECONOMIC IMPACT - Hartford County	10
PROJECTED ECONOMIC IMPACT – State of CT	11
SUMMARY ECONOMIC IMPACT CHARTS	12
INTRODUCTION	
INTRODUCTION	13
NATURE OF ASSIGNMENT	14
DESCRIPTION OF DEVELOPMENT	1:
ECONOMIC /FISCAL IMPACT	
ECONOMIC IMPACT	10
REMI MODEL DESCRIPTION & METHODOLOGY	1'
ECONOMIC IMPACT – HARTFORD COUNTY	20
ECONOMIC IMPACT – STATE OF CONNECTICUT	2:
CONSLUSIONS	20
APPENDIX	
DELGE DE COME	
REMI Raw Output - State of CT	
REMI Raw Output – Hartford County	
Rentschler Economic-Fiscal Analysis	Page 4

Executive Summary

SITE DESCRIPTION & DEVELOPMENT PROGRAM – RENTSCHLER PROJECT

The proposed development involving more than \$1.44 billion in new construction calls for a mix of uses that includes office, R&D, commercial, retail, hotel, dining & entertainment, education and residential. With construction phased in over a 12 year period between 2007 and 2019, the project is expected to support up to14,768 direct jobs by its completion. A summary breakout of the various elements of the proposed development is provided in the chart below:

Development Program - Rentschler Project

	Development Frogra				
Land Use Type	Description	Size (sf)	Phase 1 2007-2010	Later Phases 2010-2020	Direct Employment
Office/Research	General Office	862,000		862,000	3,448
	Single Tenant Office	480,000		480,000	1,920
	Research and Development	700,000	100,000	600,000	2,120
Education	Fire Station	20,000		20,000	20
	University/College	120,000		120,000	171
Sports/Medical	Sports Medical Facility	93,000	_	93,000	93
-	Pharmacy	10,000		10,000	29
	Health Club	50,000		50,000	50
	Multi-Purpose Recreational	40,000		40,000	40
	Racquet/Tennis Club	60,000		60,000	10
	Soccer Complex	170,000		170,000	213
Hotels	Hotel	480,000		480,000	480
	Hotel	230,000		230,000	230
Residential	Condominiums	190,000		190,000	10
Destination	Shopping Center	1,634,500	572,500	1,062,000	4,669
Entertainment and	Free Standing Discount Store	227,500	227,500		227
Retail	Supermarket	50,000		50,000	227
	Live Theater	20,000		20,000	27
	Movie Theater	100,000		100,000	125
	Furniture Store	100,000		100,000	286
	Coffee Shop	5,000		5,000	15
	Bar/Drinking Place	36,000		36,000	108
	Quality Restaurant	60,000		60,000	180
TOTAL		5,673,000	900,000	4,773,000	14,768

Source: The Matos Group

Note: The proposed uses for the site development, particularly the later phases, are subject to change. Future land uses will be determined by market conditions and other factors that may fluctuate over time. The purpose of this table is to present a reasonable full build development scenario for the purpose of estimating environmental and socioeconomic impacts.

REMI MODEL

Model Description

Economic and fiscal impacts for the development have been calculated employing the Regional Economic Models, Inc (REMI) model. This program represents a customized econometric-based input-output model of Connecticut and sub-regions that can be used to forecast the economic and demographic effects of policy initiatives and external events on the state and local economy. The REMI model evaluates the dynamic cause and effect impacts on a yearly basis of such changes as associated with inter-industry relationships in the region among 466 private industries, which aggregate into 49 major industrial sectors. The addition of public sector industries and farming produces a total of 53 sectors covered by the model. The model includes over 6,000 input variables that can be adjusted to simulate any given proposed change in the local economy. The REMI model begins with a baseline projection of how the local economy would function in the absence of any external change and this is compared to results generated from input reflecting the exogenous event (new development, new factory, new tax policy). Factors considered in the course of this analysis include, but are not limited to, the following: projected construction costs and phasing of the proposed development; anticipated direct employment and wages associated with the operations of facilities built; determination of intermediate and final demands for each industry fulfilled by producers in the region resulting from the development and an analysis of the direct tax base contribution and tax revenue generated by the proposed uses.

Economic Impact Definitions

Economic impact is the "umbrella" term for numerous components in an economy subject to change due to some type of intervention generally centered on jobs created (or lost), earnings generated and output created. The following are some of the more important terms and their definition in the REMI Model describing those changes.

Gross State Product: An important result of the REMI model providing a measure of dollar value of all final output produced in Connecticut in a given year as a result of the employment or investment or new economic policy. It is equal to output excluding the intermediate inputs (compensation + profits). It is analogous to the national concept for Gross Domestic Product.

Output: The sum of economic activity amount linked to production in dollars, including all intermediate goods purchased as well as value added (compensation and profit). In the case of the construction for example, output is the total development budget.

Intermediate Effects: Economic effects resulting from the purchase of intermediate goods, i.e. inputs to the production of final goods such as steel for construction.

Induced Effects: Economic effects resulting from the re-spending of wages, i.e. new employees have money to spend.

Indirect Effects: All of the economic effects not included in the exogenous (direct) change entered through policy variables for a simulation; indirect effects= induced effects + intermediate effects. Thus it is the continuing annual flow of money as transactions take place after initially being put into the economy, sometimes informally referred to as the "ripple effect".

Direct Impact: The annual amount of money put into the economy and jobs created by the project itself. Direct jobs impacts include, for example, construction workers in the construction phase and office workers during the operational phase.

Direct Jobs: The jobs created by the project itself, in the case of Rentschler totaling 14,768.

Net New Jobs: Actual new jobs created due to capturing economic activity which previously left the economic system or attracting new economic activity or spending outside the state or region that previously did not exist.

Disposable Income: Personal Income minus taxes.

Real Disposable Income: Personal Income minus taxes adjusted for inflation.

Assumptions

The REMI model for Connecticut is customized to the state and region's particular economic environment and industry inter-relationships supported by state and county specific data variables for industry specific wage rates, production costs, employment, profitability, sales prices, consumer prices, housing prices, employment opportunity, population, state and local spending, investment, income, personal consumption to name just a few variables. Without change, these variables establish the baseline that can be measured against any economic intervention or exogenous economic event.

The following assumptions were used to represent the impact of Rentschler Project. These assumptions were consequently translated to the appropriate variable input in the REMI model.

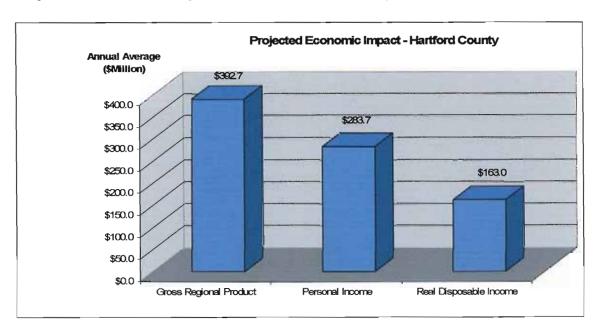
- 1. Property tax mill rates used are from OPM updated (as of 4/12/05)
- 2. The taxable bond rate from the Office of the State Treasurer is 5.0% which is used for terms of government debt as well as net present value calculations on results.
- 3. Real property is depreciated over 39 years.
- 4. Total construction cost of the Rentschler Development in current dollars is estimated at \$1.44 billion. Based on information provided by developers (The Matos Group), capital expenditures for construction are to be phased over a 12 year period 2007-2019. It is assumed that construction investment begins with \$211.0 million in 2007, \$576.8 million in 2011, \$367.4 million in 2014 and \$280.2 million in 2017. Construction estimates were provided by both proprietary data sources (RS Means Construction Estimates (2006)) and The Matos Group, project developer for Rentschler.
- 5. Employment data was estimated for on going operations within the facilities to be built as provided by The Matos Group. A complete chart detailing estimated employment by land use type is provided in the appendix.
- 6. While it was assumed much of the new activity would operate and compete for market share within the existing economic environment as modeled in baseline REMI, for a number of land uses different assumptions were used to decide how much economic activity to be modeled was net new. These adjustments reduce the crowding out effect relative to REMI's baseline estimates for Connecticut. Thus for the Land Use associated with hotel, office space and engineering it was assumed 50% would be net new. Additionally, it was assumed the space now configured for Cabella's superstore would be 50% net new. The remaining new activity generally fell into baseline shares existing within the model that generally range between 10 to 25% net new or imported.
- 7. In order to gauge the impact of the development of the Master Plan regionally and within the state, the REMI model scenarios were run for both Hartford County and Connecticut. Given the economic activity is exclusively centered in Hartford County it is expected the impact would be largely limited to the region. Since the investment is made by the state to support the project and all residents in the state must share the opportunity cost linked with public expenditure, the cost benefit analysis compares statewide benefits to the public expenditure.

PROJECTED ECONOMIC IMPACT - HARTFORD COUNTY

Over a study period encompassing 20 years from 2007 to 2026, the following economic impacts highlighted below were identified for *Hartford County* as the result of development of Rentschler as proposed in the Master Plan Development:

- \$4.1 billion increase in Gross Regional Product (at present value) within Hartford County, averaging \$392.7 million a year over baseline projections for the region. By 2026, Gross Regional Product is expected to grow to \$703.1 million.
- Annual increase of \$283.7 million in personal income for Hartford County residents; or \$163.0 million annually in Real Disposable Income. Total earnings for the county in constant dollars projected at \$1.7 billion.
- Job growth averaging 4,390 net new jobs in Hartford County per year, peaking at 6,761 net new jobs in 2021.
- New local net tax revenues averaging \$22.7 million annually, with much of this accruing to East Hartford.

Projected Economic Impact of Rentschler Development on Hartford County

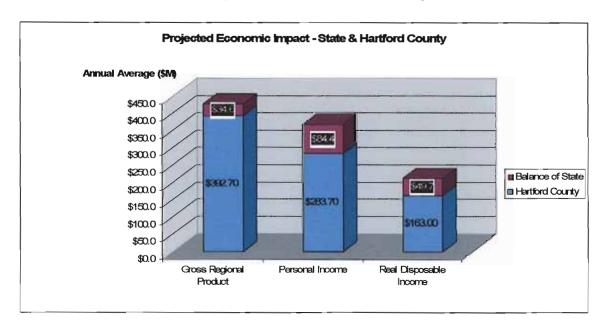


PROJECTED ECONOMIC IMPACT – STATE OF CONNECTICUT

Over a study period encompassing 20 years from 2007 to 2026, the following economic impacts highlighted below were identified for the *State of Connecticut* (inclusive of Hartford County) resulting from development of Rentschler as proposed in the Master Plan:

- \$4.4 billion increase in Gross State Product (at present value) resulting from Rentschler Development, averaging \$427.3 million increase a year over baseline projections for the State. By 2026, Gross Regional Product is expected to grow to \$773.2 million.
- Yearly Increase in personal income averaging \$368.2 million; or \$212.8 million annually in Real Disposable Income representing true purchasing power of households. Total accumulated personal income for the state residents in constant dollars projected at \$3.7 billion and \$2.2 billion for Real Disposable Income.
- Job increase averaging 4,651 net new jobs per year, peaking at 7,055 net new jobs in 2021.
- Net Tax Revenue growth of \$23.5 million state-wide annually, accumulating to a total of \$266.9 million in constant dollars over the 20 year span.
- Positive Cost-Benefit impact corresponding to 36.9 to 1 indicating a very
 favorable ratio respective to return on investment of public dollars in
 redevelopment projects. Ratio compares net present value of real disposable
 income in the state (the benefit) and the public investment (or cost), in the project
 of \$78 million over a ten year period for public improvements in support of
 development.

Projected Economic Impact of Rentschler Development on State



SUMMARY CHARTS OF ECONOMIC IMPACT RESULTS

The following tables provide a summary of projected economic impact in the county and state associated with build-out and operation of the Rentschler Development.

Economic Impact of Rentschler Development on Hartford County

Variable	Average Annual 10 years	Average Annual 20 Years	NPV- Total 20 year
Net New Total Employment	2,473	4,390	
Gross Regional Product	\$182,229,150	\$392,723,721	\$4,088,450,039
Personal Income	\$121,023,000	\$283,786,500	\$2,917,435,999
Real Disposable Income	\$77,795,254	\$163,051,205	\$1,705,372,885
Population	104	144	
Net Tax Revenue	\$16,938,163	\$22,709,121	\$258,616,695

Economic Impact of Rentschler Development on State of Connecticut*

Variable	Average Annual 10 years	Average Annual 20 Years	NPV-Total 20 year
Net New Total Employment	2851	4651	
Gross State Product	\$194,611,561	\$427,360,878	\$4,435,797,395
Personal Income	\$155,762,000	\$368,206,000	\$3,780,960,230
Real Disposable Income	\$100,355,733	\$212,807,270	\$2,221,496,630
Population	1,251	3,468	
Total State Tax Revenue	\$17,200,456	\$23,549,851	\$266,887,045

*Inclusive of Hartford County Note: NPV = Net present Value Introduction

NATURE OF ASSIGNMENT

This is an Economic and Fiscal Impact Analysis involving the construction and on-going operation of a proposed Master Plan entailing a mixed-use project in East Hartford, Connecticut. The total build-out calls for an estimated 5.7 million square feet in new space at an estimated construction cost of \$1.44 billion (current dollars). Phasing of the mixed-use project is expected to occur over a twelve year period.

The subject property consists of a 650-acre site in East Hartford, contiguous to United Technology Corporation's Pratt & Whitney facility and United Technology Research Center. Rentschler Stadium, built in 2002 and serving as the home of University of Connecticut's football team, also borders the subject property. The 650-acre study area is largely unimproved and vacant with more than 280 acres linked to a corporate airstrip officially decommissioned in 1994.

The primary purpose of this Study is to analyze both the economic and fiscal impact on the region and state resulting from the development of the proposed mixed-use project at the subject property. The development scenario for the site is as follows:

- 1. Office
- 2. Research & Development
- 3. Retail
- 4. Education facility
- 5. Hotel and restaurant
- 6. Sports & Medical facilities
- 7. Entertainment & Dining

Economic and fiscal impacts for the development have been calculated employing the **Regional Economic Models, Inc (REMI)** model. This program represents a customized econometric-based input-output model of Connecticut and sub-regions that can be used to forecast the economic and demographic effects of policy initiatives and external events on the state and local economy. The REMI model evaluates the dynamic cause and effect impacts on a yearly basis of such changes as associated with inter-industry relationships in the region among 466 private industries, which aggregate into 49 major industrial sectors. The addition of public sector industries and farming produces a total of 53 sectors covered by the model. Factors considered in the course of this analysis include, but are not limited to, the following: the projected construction costs and phasing of the proposed development; anticipated direct employment and wages associated with the operations of facilities built; determination of intermediate and final demands for each industry fulfilled by producers in the region resulting from the development and an analysis of the direct tax base contribution and net tax revenue generated by the proposed uses.

DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development calls for construction of approximately 5.7 million square feet of new buildings with an estimated construction expenditure of \$1.44 billion in current dollars. The Master Plan provides for a mix of uses that includes office, R&D, commercial, retail, hotel, dining & entertainment, education and residential. Phased in over a 12 year period between 2007 and 2019, the project is expected to support up to 14,768 jobs by its completion although not necessarily net new jobs to the state as will be discussed in the economic impact section of the report. A summary breakout of the various elements of the proposed development is provided in the chart below:

Master Plan - Rentschler Development

Land Use Type	Description	Size (sf)	Phase 1 2007-2010	Later Phases 2010-2020	Employment
Office/Research	General Office	862,000		862,000	3,448
	Single Tenant Office	480,000		480,000	1,920
	Research and Development	700,000	100,000	600,000	2,120
Education	Fire Station	20,000		20,000	20
	University/College	120,000		120,000	171
Sports/Medical	Sports Medical Facility	93,000		93,000	93
	Pharmacy	10,000		10,000	29
	Health Club	50,000		50,000	50
	Multi-Purpose Recreational	40,000		40,000	40
	Racquet/Tennis Club	60,000		60,000	10
	Soccer Complex	170,000		170,000	213
Hotels	Hotel	480,000		480,000	480
	Hotel	230,000		230,000	230
Residential	Condominiums	190,000		190,000	10
Destination	Shopping Center	1,634,500	572,500	1,062,000	4,669
Entertainment and	Free Standing Discount Store	227,500	227,500	-	227
Retail	Supermarket	50,000	-	50,000	227
	Live Theater	20,000		20,000	27
	Movie Theater	100,000		100,000	125
	Furniture Store	100,000		100,000	286
	Coffee Shop	5,000		5,000	15
	Bar/Drinking Place	36,000		36,000	108
	Quality Restaurant	60,000		60,000	180
TOTAL		5,673,000	900,000	4,773,000	14,768

Source: The Matos Group

Note: The proposed uses for the site development, particularly the later phases, are subject to change. Future land uses will be determined by market conditions and other factors that may fluctuate over time. The purpose of this table is to present a reasonable full build development scenario for the purpose of estimating environmental and socioeconomic impacts.

Part Two:

Economic Impact of Proposed Development

REMI Model Description

The Regional Economic Models, Inc. (REMI) Policy Insight Model was chosen to evaluate the impact of the proposed Master Plan. REMI was established as a firm in 1980 and has spent two decades constructing simulation models that forecast the economic and demographic effects of external economic events on a local economy. The REMI Policy Insight Model has been evaluated by MIT and other peer reviewers and has been used extensively by national, regional, state and city governments as well as universities, public utilities, and consulting firms.

The REMI Policy Insight is a simulation model that integrates key aspects of three types of economic models: Input/Output (I/O) models, Computer Generated Equilibrium (CGE) models and econometric models. Incorporated in the model is a systematic series of structural equations that capture the interrelationships among major components of the economy including output, supply and demand for labor and capital, market prices and shares, wages and population. Unlike other static economic impact models, the REMI Policy Insight model is a dynamic model that forecasts how changes in the economy, as well as adjustment to those changes, will occur on a year to year basis.

The REMI model is a structural model, meaning that it includes cause and effect relationships. The model shares two key underlying assumptions with mainstream economic theory: households maximize utility and producers maximize profits. Thus in the model businesses produce goods or invests to sell to other firms, consumers investors, governments, and purchasers outside the region. The output is produced using labor, capital, fuel, and intermediate inputs (goods and services needed to produce final demand). The demand for labor capital, fuel per unit of output depends on their relative costs because an increase in the price of any one of these inputs leads to substitution away from that input to other inputs. The supply of labor in the model depends on the number of people in the population and the proportion of those people who participate in the labor force. The dynamic nature of the model even simulates economic migration associated with job growth which affects the population size and consumer demand.

Supply and demand for labor in the model determine wage rates. These wage rates along with other prices and productivity determine the cost of doing business for every industry in the model. An increase in the cost of doing business causes either an increase in price or a cut in profits, depending on the market for the product. In any case, increases in cost decreases the share of the local and US market supplied by local firms. This market share along with demand determines the amount of local output. Feedbacks in the model are many and include changes in wages and employment on income and consumption or changes in population on government spending.

The REMI Policy Insight Model for Connecticut takes the U.S. I/O results and scales them to the state and county level according to regional relationships and current economic conditions. Data for the REMI model are obtained from the Bureau of Economic Analysis, the Bureau of Labor Statistics, the Department of Energy, the

Census Bureau, and other public sources. Based on this data, a control or baseline forecast is generated for the state and regions to the year 2035. This forecast simulates the expected long-term growth of the state and region based on past and current trends and conditions assuming no interventions. To determine what impact a policy or an investment will have on regional economy, various assumptions are entered into the model as input respective to changes in the economy of which there are more than 6,000 variables. The difference between the baseline and the simulated forecast incorporating new assumptions represents the economic activity or impact related to the intervention (i.e. new policy, new investment, closing of plant, new airport, ect). Given analysis are conducted over 10 to 20 year periods, future dollar values are generally discounted to present value to better evaluate impact.

Definitions

Economic impact is the "umbrella" term for numerous components in an economy subject to change due to some type of intervention generally centered on jobs created (or lost), earnings generated and output created. The following are some of the more important terms and their definition in REMI Model describing those changes.

Gross State Product: A measure of dollar value of all final output produced in Connecticut in a given year as a result of the employment or investment. It is equal to output excluding the intermediate inputs (compensation + profits). It is analogous to the national concept for Gross Domestic Product.

Output: The sum of economic activity amount linked to production in dollars, including all intermediate goods purchased as well as value added (compensation and profit). In the case of the construction for example, output is the total development budget.

Intermediate Effects: Economic effects resulting from the purchase of intermediate goods, i.e. inputs to the production of final goods such as steel for construction.

Induced Effects: Economic effect resulting from the re-spending of wages, i.e. net new employees have money to spend.

Indirect Effects: All of the economic effects not included in the exogenous (direct) change entered through policy variables for a simulation; indirect effects= induced effects + intermediate effects. Thus it is the continuing annual flow of money as transactions take place after initially being put into the economy, sometimes informally referred to as the "ripple effect".

Direct Impact: The annual amount of money put into the economy and jobs created by the project itself. Direct jobs impacts include, for example, construction workers in the construction phase and office workers during the operational phase.

Disposable Income: Personal Income minus taxes.

Assumptions

The REMI model for Connecticut is customized to the state and region's particular economic environment and industry inter-relationships supported by state and county specific data variables for industry specific wage rates, production costs, employment, profitability, sales prices, consumer prices, housing prices, employment opportunity, population, state and local spending, investment, income, personal consumption to name just a few variables. Without change, these variables establish the baseline that can be measured against any economic intervention or exogenous economic event.

The following assumptions were used to represent the impact of Rentschler Project. These assumptions were consequently translated to the appropriate variable input in the REMI model.

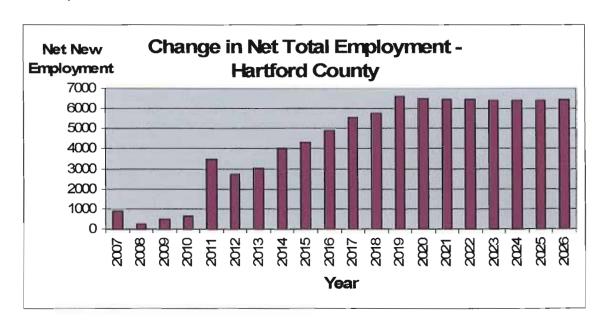
- 1. Property tax mill rates used are from OPM updated (as of 4/12/05)
- 2. The taxable bond rate from the Office of the State Treasurer is 5.0% which is used for terms of government debt as well as net present value calculations on results.
- Real property is depreciated over 39 years.
- 4. Total construction cost of the Rentschler Development in current dollars is estimated at \$1.44 billion. Based on information provided by developers (The Matos Group), capital expenditures for construction are to be phased over a 12 year period 2007-2019. It is assumed that construction investment begins with \$211.0 million in 2007, \$576.8 million in 2011, \$367.4 million in 2014 and \$280.2 million in 2017. Construction estimates were provided by both proprietary data sources (RS Means Construction Estimates (2006)) and The Matos Group, project developer for Rentschler.
- 5. Employment data was estimated for on going operations within the facilities to be built as provided by The Matos Group. A complete chart detailing estimated employment by land use type is provided in the appendix.
- 6. While it was assumed much of the new activity would operate and compete for market share within the existing economic environment as modeled in baseline REMI, for a number of land uses different assumptions were used to decide how much net new economic activity was to be modeled. These adjustments reduce the crowding out effect relative to REMI's baseline estimates for Connecticut. Thus for the Land Use associated with hotel, office space and engineering it was assumed 50% would be net new. Additionally, it was assumed the space now configured for Cabella's superstore would be 50% net new. The remaining new activity generally fell into baseline shares existing within the model that generally range between 10 to 25% net new or imported.
- 7. In order to gauge the impact of the development of the Master Plan regionally and within the state, the REMI model scenarios were run for both Hartford County and Connecticut. Given the economic activity is exclusively centered in Hartford County it is expected the impact would be largely limited to the region. Since the investment is made by the state to support the project and all residents in the sate must share the opportunity cost linked with public expenditure, the cost benefit analysis compares statewide benefits to the public expenditure.

ECONOMIC IMPACT – HARTFORD COUNTY

Hartford County is projected to capture much of the impact from the proposed build-out of the Rentschler Master Plan. Upon total build-out projected for completion by 2019, it is estimated the project will be supporting 14,768 direct jobs. However, based on REMI model not all jobs are projected as **net** new due to constraints of interrelated market share among state and regional business sectors for exporting and importing, or capacity of such industries to increase production to meet new demand. Thus while direct jobs are an important consideration in evaluating impact, of greater importance is the impact of net new jobs as defined as that economic activity or consumption captured which formerly left the region or the attraction of new spending to the region from outside the area.

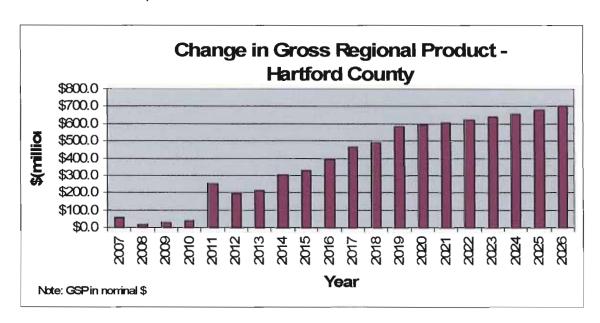
The REMI model projects that *net* new job creation in Hartford County resulting from the development will average 4,390 jobs a year over a 20 year period (2007 to 2026) over baseline projections. Not surprisingly, major job spikes are expected to occur during periods of construction and shortly thereafter as operations commence. These construction periods occur in 2007, 2011, 2014, and finally ending in 2017. As can be seen in Figure 1 below, the impact of construction can be seen in the noted years with net new employment remaining positive in the early years even as construction jobs are lost. Meanwhile, jobs continue to increase each year subsequent to Phase II investment in 2011. Finally, peak net new employment occurs in 2019 at 6,587 jobs and gradually levels off as productivity gains from the initial investment are realized over time. As will be discussed in the state impact analysis, Hartford County will be the main beneficiary of the job creation from the development accounting for 94% of the total net new employment gains (direct and indirect).

Figure 1: Net New Employment in Hartford County Resulting from Rentschler Development Investment



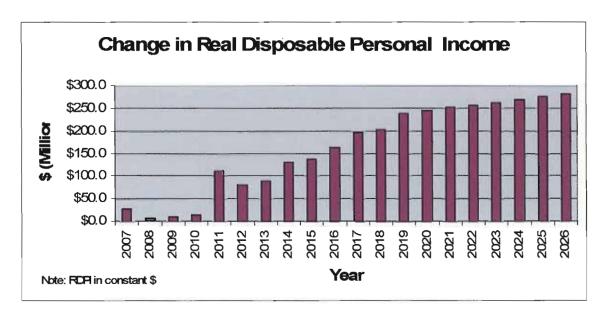
Gross Regional Product (GRP) is another important measure of change in economic impact analysis representing the dollar value of all final output, including final demand and value added, produced in the region or state (i.e. total economic activity) resulting from the investment. With respect to Rentschler the impact on GRP is substantial in Hartford County averaging \$392 million a year over a 20 year period, and translating to total net gain of \$4.1 billion at net present value for the study period. By 2026, GRP in Hartford County resulting from the Rentschler investment is projected to reach \$669.6 million in present dollars. Figure 2 displays the annual change in GRP in Hartford County resulting from the Rentschler investment through 2026.

Figure 2: Change in Gross Regional Product in Hartford County Resulting from Rentschler Development Investment



In tandem with the significant expansion of GRP, Rentschler Development is expected to have a considerable positive impact on consumer wealth in the County. Personal income in Hartford County is projected to average \$283.7 million yearly for a total gain of \$2.9 billion (present value). Much of this new income is fed back into the economic system and is an important part of the total gain expressed in GRP. After taxes disposable income adjusted for inflation (Real Disposable Personal Income), representing a truer measure of consumer purchase capacity, is projected to average \$163 million a year in the county for a total net gain of \$1.7 billion at net present value by 2026 (see Figure 3). The importance of this impact can be seen in the breakout by type of spending by Final Demand in the model where it shows much of the final demand stimulus created by the Rentschler Development is derived from consumer spending.

Figure 3: Change in Real Disposable Personal Income in Hartford County Resulting from Rentschler Development Investment



Finally, the REMI model projects the County will average \$22.7 million annually in net tax revenues¹ over the 20 year study period (current dollars). These taxes have net present value of \$258.6 million. Although the model output presents the added tax revenues on a county-wide basis, East Hartford will be the primary beneficiary of these taxes.

Below is a summary table of the economic impacts projected for Hartford County as the result of the Rentschler Investment.

Table 1: Summary of Economic Impact of Rentschler Development on Hartford County

Variable	Average Annual 10 years	Average Annual 20 Years	NPV – Total 20 years
Net New Total Employment	2,473	4,390	
Gross Regional Product	\$182,229,150	\$392,723,721	\$4,088,450,039
Personal Income	\$121,023,000	\$283,786,500	\$2,917,435,999
Real Disposable Income	\$77,795,254	\$163,051,205	\$1,705,372,885
Population	104	144	
Net Tax Revenue	\$16,938,163	\$22,709,121	\$258,616,695

Note: NPV = Net Present Value

¹ Net Tax Revenues = Total Tax Revenue minus Total Government Expenditures

ECONOMIC IMPACT – STATE OF CONNECTICUT

As previously discussed and as can be seen from Figure 4-6 below, much of the economic impact is expected to be centered in Hartford County which incorporates 29 towns in the state with a highly diversified business sector and ranks highest among counties in population density which impacts on local labor availability. However, as build-out occurs and the effects of dollars spent by new employees ripples through the state economy, impacts occur outside the region in terms of population dispersion, improved property values, household incomes and employment opportunities over time.

The impact of Rentschler investment on creation of net new job opportunities outside the county is relatively small (see Figure 4). By 2026 *net new* employment for the entire state equals 6,877 employees of which 94% originates in the county and 6%, or 412 jobs, represents the balance of the state. Consistent with the county trend discussed earlier, employment growth occurring outside Hartford County but in-state from Rentschler peaks at year 2019 with 7,055 jobs and levels off thereafter.

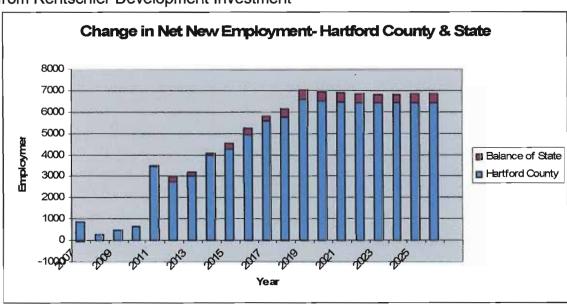
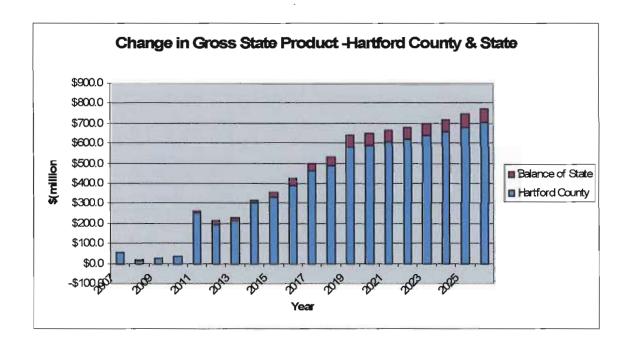


Figure 4: Net New Employment in Hartford County & Balance of State Resulting from Rentschler Development Investment

A much more significant state-wide impact outside the county is seen in the increase in Gross State Product resulting from development of Rentschler Field. Total Gross State Product is projected to grow to \$773.2 million by 2026 (or \$736.4 million constant \$). Although in the initial years change in GSP outside the county is relatively minor it is projected to grow from 6% of overall GSP in 2009 to 10% by 2026. Over the 20 year period, the state is expected to see a cumulative gain in GSP of \$4.4 billion (constant\$) of which \$347.3 million (constant \$) occurs in surrounding towns and communities external to Hartford County.

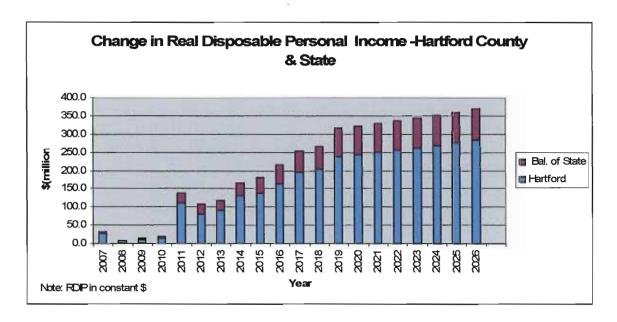
Figure 5: Net Change in Gross State Product in Hartford County & Balance of State Resulting from Rentschler Development Investment



The greatest impact from Rentschler Development on a state wide basis as compared to Hartford County is seen in growth in personal income. While much of this gain will continue to reside in the county, local commuting patterns that draw workers from all over the state will result in wide geographical distribution of workers linked to the development. The economic ripple effect linked to the development itself will also create job opportunities outside the county which in turn adds to personal income growth in these areas.

The impact on total personal income for the state over the 20 year study period is expected to be \$7.3 billion or \$3.78 billion in present value terms. Annualized, this translates to an average gain for state households in personal income each year of \$368.2 million. Of this total income gain, 22.8% will originate outside Hartford County representing a net present value of \$863 million. Real Disposable Personal Income, or RDPI (Personal Income minus taxes and adjusted for inflation) for the state will average \$212 million a year which corresponds to a total of \$2.2 billion in 20 years. Hartford County's share of total RDPI is \$1.7 billion as compared to \$516 million for the balance of the state (see Figure 6).

Figure 6: Net Change in Real Disposable Income in Hartford County & Balance of State Resulting from Rentschler Development Investment



The REMI model projects a sizable positive fiscal impact to the state resulting from the Rentschler Development. The results show an average gain in state-wide tax revenues over 20 years of \$23.5 million. On a cumulated basis over 20 years, these taxes have a present value of \$266.9 million.

Below is a summary table of the economic impacts projected for the State of Connecticut as the result of the Rentschler Investment.

Table 2: Summary of Economic Impact of Rentschler Development on State

Variable	Average Annual	Average Annual	NPV –
	10 years	20 Years	Total 20 years
Net New Total Employment	2851	4651	
Direct Employment	5015	9629	
Gross State Product	\$194,611,561	\$427,360,878	\$4,435,797,395
Personal Income	\$155,762,000	\$368,206,000	\$3,780,960,230
Real Disposable Income	\$100,355,733	\$212,807,270	\$2,221,496,630
Population	1,251	3,468	
Total State Tax Revenue	\$17,200,456	\$23,549,851	\$266,887,045

Note: NPV = Net Present Value (2007)

CONCLUSIONS

The Master Plan for the proposed Rentschler Development on 650 acres in East Hartford, Connecticut calls for 5.7 million square feet in new facilities to house office, research & development, retail, commercial, medical & sports facilities, hotel, residential, education and destination entertainment and dining. The estimated construction budget for the development in current dollars is \$1.44 billion to be phased in over a twelve year period from 2007 to 2019. In order to support this project the State of Connecticut is providing financial support in the amount \$78 million for public improvements phased in at \$12 million between 2007 and 2010 and \$66 million between 2011 and 2013.

Based on results of the REMI model, the development is projected to have substantial positive economic impacts to both the region and state. Gross State Product is projected to increase on an annual average of \$427,360,878 in current dollars

In order to determine the cost benefit ratio of the public investment in Rentschler, we compare statewide benefits in terms of the change in personal income to the total expenditure financed by the state. For purpose of this analysis we used Real Disposable Personal Income representing disposable income adjusted for inflation. Increases in this measure represent improvements in real buying power and therefore improved (economic) standard of living. To compute the Benefit/Cost ratio we compare the real present values in Disposable Incomes for the state as a whole to real present values of state expenditures. Based on this analysis, the benefit-cost ratio corresponds to 36.9 to 1 which is a quite favorable in comparison to accepted norms of return on investment of public dollars in typical redevelopment projects. In other words, state residents are getting \$36.90 in real disposable income dollars for each dollar of public expenditure.

There are other significant economic benefits as well linked to the development. Gross State Product in Connecticut will have grown by \$773.2 million by 2026 with overall aggregate gains of \$4.4 billion in current dollars. Hartford County will be main beneficiary with GRP aggregate increase of \$4.1 billion. Meanwhile net new employment is expected to average 4,651 jobs a year while peaking at 7,055 in 2019.

² A \$9.9 million grant to the Cabella Superstore issued by Connecticut Development Authority is not included in the total public investment but would drop the benefit-cost ratio to 31.9 to 1.

APPENDIX

	2017	5.578	0.2966	0.3234	0.3265	0.06786	0.1627	3.036	0.4167	0.4167	2.257	0.251	0.4332	0.000411	0.000682	-5.78E-06	0.00035	6.72E-05	0.000634	0.06399	0.187	0.005032	-0.01432	0.2555	-0.04993
		4.934																							
		4.303																							
	2014	3.998	0.2055	0.222	0.2065	0.04344	0.1091	1.753	0.3782	0.3782	1.399	0.1871	0.3072	0.00028	0.000467	-5.36E-06	0.000214	3.33E-05	0.000672	0.03405	0.1531	0.007294	-0.00053	0.1474	-0.0312
	2013	3.029	0.1478	0.1591	0.1418	0.03615	0.07495	1.343	0.2658	0.2658	1.089	0.07443	0.2014	0.000237	0.000393	-7.09E-06	0.000168	1.99E-05	0.000302	0.01127	0.06316	0.001628	-0.00706	0.1437	-0.03413
	2012	2.754	0.139	0.1492	0.1254	0.03284	0.06738	1.052	0.261	0.2609	0.8886	0.09217	0.1907	0.000217	0.000356	-7.75E-06	0.000135	-3.70E-06	0.000231	0.02507	0.06709	0.001385	-0.00541	0.1277	-0.02159
	2011	3.457	0.1846	0.1975	0.1595	0.01971	0.0923	0.7725	0.4878	0.4878	0.7086	0.243	0.3026	0.000135	0.000231	-2.50E-06	0.0001	6.44E-06	0.000771	0.055	0.188	0.01085	0.01236	0.09135	-0.01604
	2010	0.6475	0.02758	0.02943	0.02286	0.006424	0.01271	0.2742	0.06217	0.06217	0.2191	-0.00491	0.03453	4.51E-05	7.59E-05	-1.91E-06	3.36E-05	4.29E-06	7.64E-05	-0.00762	0.002689	1.48E-05	-0.00159	0.03341	-0.01288
	2009	0.4758	0.01981	0.02105	0.01597	0.00473	0.009024	0.207	0.0457	0.04569	0.1665	-0.00221	0.02345	3.36E-05	5.67E-05	-3.82E-06	2.53E-05	6.68E-06	5.72E-05	-0.00493	0.002724	3.34E-05	-0.00112	0.02182	-0.0095
	2008	0.2502	0.01152	0.01218	0.01003	0.005325	0.005316	0.1576	0.009851	0.009839	0.1292	0.01123	0.01257	3.61E-05	5.83E-05	-3.34E-06	1.97E-05	8.11E-06	1.15E-05	0.004238	0.006989	1.10E-05	-0.00083	0.006392	-0.00178
	2007	0.8847 0.2502	0.04458	0.04695	0.03617	0.003479	0.0229	0.1449	0.1433	0.1433	0.1437	0.07444	0.07893	2.54E-05	4.42E-05	-1.13E-06	1.90E-05	0	0.000309	0.01278	0.06165	0.004048	0.005934	0.007305	-0.00355
REMI Output - Hartford County	Variable	Employment (Thous)	GRP (Bil Chained 96\$)	GRP (Bil Fixed 96\$)	Pers Inc (Bil Nom \$)	PCE-Price Index (Fixed 96\$)	Real Disp Pers Inc (Bil Fixed 96\$)	Population (Thous)	Econ Migrants	Total Migrants	Labor Force	Demand (Bil Fixed 96\$)	Output (Bil Fixed 96\$)	Delivered Price	Rel Cost of Production	Labor Intensity	Labor Access Index	Indust Mix Index	Reg Pur Coeff (SS over Dem)	Imports (Bil Fixed 96\$)	Self Supply (Bil Fixed 96\$)	Exports to Multiregions (Bil Fixed 96\$)	Exports to Rest of Nation (Bil Fixed 96\$)	Exp to Rest of World (Bil Fixed 96\$)	Wage Rate (Thous Nom\$)

REMI Output - Hartford County	9700	9	CCCC	7000	ć	6		1000	600
	2018	2019	2020	2021	2022	2023		2025	2026
Employment (Thous)	5.783	6.587	6.521	6.471	6.436	6.417		6.421	6.442
(\$96	0.3064	0.3579	0.3574	0.3578	0.3594	0.3619		0.3704	0.376
	0.335	0.3924	0.3929	0.3944	0.3971	0.4009		0.4122	0.4194
(2)	0.3455	0.412	0.43	0.4471	0.4642	0.4815		0.5192	0.5396
PCE-Price Index (Fixed 96\$)	0.07483	0.08179	0.08673	0.08713	0.08591	0.08356		0.07747	0.07426
Real Disp Pers Inc (Bil Fixed 96\$)	0.1682	0.1981	0.2027	0.2075	0.2124	0.2174	0.2228	0.2284	0.2343
Population (Thous)	3.469	3.963	4.387	4.757	5.08	5.367		5.847	6.051
	0.3684	0.42	0.3404	0.2805	0.2322	0.1917		0.1304	0.1057
	0.3684	0.42	0.3404	0.2805	0.2322	0.1917		0.1303	0.1056
	2.51	2.828	3.054	3.223	3.354	3.461		3.635	3.712
Demand (Bil Fixed 96\$)	0.202	0.2636	0.2634	0.2643	0.2665	0.2699		0.2826	0.2914
Output (Bil Fixed 96\$)	0.426	0.5083	0.5055	0.5049	0.5066	0.5104		0.5254	0.5359
	0.000444	0.000476	0.000492	0.000482	0.000463	0.000438		0.000383	0.000357
Rel Cost of Production	0.000734	0.000788	0.000813	0.000798	0.000766	0.000725		0.000635	0.000591
	-7.93E-06	-8.29E-06	-9.12E-06	-1.01E-05	-1.08E-05	-1.12E-05	,	-1.04E-05	-9.54E-06
abor Access Index	0.000392	0.000442	0.000479	0.000507	0.000529	0.000545	_	0.000567	0.000575
	7.98E-05	9.70E-05	0.000117	0.000132	0.000151	0.000172	_	0.00021	0.000227
Reg Pur Coeff (SS over Dem)	0.000399	0.000436	0.000411	0.000393	0.000379	0.00037		0.000364	0.000367
Imports (Bil Fixed 96\$)	0.06025	0.0852	0.08685	0.08844	0.09015	0.09208		0.0975	0.1009
Self Supply (Bil Fixed 96\$)	0.1418	0.1784	0.1766	0.1759	0.1763	0.1778		0.1851	0.1905
Exports to Multiregions (Bil Fixed 9	0.000365	0.000399	-0.00042	-0.00109	-0.00162	-0.00198		-0.00224	-0.00215
Exports to Rest of Nation (Bil Fixed	-0.02524	-0.02936	-0.03313	-0.03623	-0.03864	-0.04031		-0.04176	-0.04173
d (Bil Fixed 96\$	0.3091	0.3588	0.3625	0.3663	0.3705	0.3749		0.3843	0.3893
Nage Rate (Thous Nom\$)	-0.06587	-0.07156	-0.0723	-0.0771	-0.08424	-0.09294		-0.1131	-0.1241

REMI Output - State of Connecitucut												
Variable	2007	2008	2009	2010	2011		2013		2015	2016	2017	
Employment (Thous)	0.8345	0.2688	0.4968	0.6777	3.48		3.191	_	4.567	5.257	5.828	
GRP (Bil Chained 96\$)	0.0433	0.01282	0.021	0.02921	0.1904		0.1591		0.2387	0.2782	0.3177	
GRP (Bil Fixed 96\$)	0.04562	0.01355	0.02231	0.03116	0.2037		0.1714		0.2586	0.3024	0.3464	
Pers Inc (Bil Nom \$)	0.04237	0.01323	0.02069	0.02963	0.1975		0.1849	_	0.2914	0.3521	0.4195	
PCE-Price Index (Fixed 96\$)	0.000641	0.001434	0.001221	0.001648	0.004364		0.009491		0.01355	0.01535	0.01723	
Real Disp Pers Inc (Bil Fixed 96\$)	0.02679	0.007126	0.01178	0.01657	0.1141		0.09818		0.15	0.1787	0.2099	
Population (Thous)	0.1689	0.1829	0.2397	0.3191	0.929		1.627	_	2.569	3.086	3.645	
Econ Migrants	0.1668	0.01086	0.05261	0.07348	0.5959		0.3154		0.4174	0.4597	0.4905	
Fotal Migrants	0.1668	0.01084	0.0526	0.07348	0.5959		0.3154		0.4174	0.4597	0.4905	
abor Force	0.2014	0.1781	0.2235	0.2924	1.006		1.53		2.306	2.716	3.16	
Demand (Bil Fixed 96\$)	0.07687	0.01489	0.002136	0.001251	0.2753		0.1151	_	0.1945	0.2452	0.3276	
Output (Bil Fixed 96\$)	0.07457	0.01476	0.02505	0.03677	0.307		0.2197		0.3315	0.3951	0.465	
Delivered Price	7.99E-06	1.14E-05	1.07E-05	1.45E-05	4.41E-05		7.73E-05		0.000106	0.000119	0.000132	
Rel Cost of Production	1.43E-05	1.88E-05	1.82E-05	2.44E-05	7.57E-05		0.000129		0.000177	0.000199	0.00022	
abor Intensity	-2.38E-07	-1.13E-06	-1.13E-06	-7.15E-07	-1.19E-06		-2.98E-06		-3.40E-06	-3.58E-06	-3.87E-06	
abor Access Index	7.33E-06	7.75E-06	1.00E-05	1.36E-05	3.97E-05		6.78E-05		0.000103	0.000122	0.000141	
Indust Mix Index	0	2.15E-06	1.67E-06	1.19E-06	1.91E-06		5.36E-06		7.87E-06	1.06E-05	1.57E-05	
Reg Pur Coeff (SS over Dem)	8.06E-05	5.31E-06	1.28E-05	1.64E-05	0.000214		8.42E-05	_	0.000106	0.000121	0.000184	
Imports (Bil Fixed 96\$)	0.01523	0.005554	-0.00232	-0.00388	0.07027		0.03011		0.06039	0.07979	0.09869	
Self Supply (Bil Fixed 96\$)	0.06166	0.009354	0.004517	0.005112	0.205		0.08501		0.1341	0.1655	0.229	
Exports to Multiregions (Bil Fixed 96\$)	0	0	0	0	0		0	_	0	0	0	
Exports to Rest of Nation (Bil Fixed 96\$)	0.005592 -0.00098	-0.00098	-0.00123	-0.00173	0.01084	-0.0067	-0.00867	-0.00301	-0.0163	-0.02074	-0.01859	
Exp to Rest of World (Bil Fixed 96\$)	0.007298	0.006369	0.02178	0.03336	0.09121		0.1433		0.2137	0.2504	0.2546	
Wage Rate (Thous Nom\$)	3.05E-05	-0.0004	-0.0025	-0.00338	-0.00127		-0.00723		-0.00959	-0.01077	-0.00833	

tput - State of Connecitucut		9	6	č	6				000	
Variable		2019	2020	2021	2022		2024	2025	2026	
		7.055	6.971	6.908	6.866		6.839	6.851	6.877	
GRP (Bil Chained 96\$)		0.393	0.3922	0.3925	0.3942		0.4015	0.4073	0.4141	
GRP (Bil Fixed 96\$)		0.4309	0.4311	0.4326	0.4356		0.4459	0.4532	0.4619	
		0.5399	0.5624	0.5834	0.6044		0.6484	0.6727	0.6985	
		0.0206	0.0219	0.02171	0.02101		0.01886	0.01756	0.01636	
Real Disp Pers Inc (Bil Fixed 96\$)		0.2613	0.2668	0.2726	0.2786		0.2914	0.2986	0.3062	
		4.771	5.278	5.712	6.086		69.9	6.939	7.161	
		0.5174	0.4072	0.3274	0.2637		0.1715	0.1378	0.1089	
		0.5174	0.4071	0.3274	0.2637		0.1714	0.1376	0.1087	
		3.959	4.271	4.492	4.661		4.901	4.997	5.088	
Demand (Bil Fixed 96\$)		0.3751	0.373	0.3724	0.3735		0.3825	0.3907	0.4014	
Output (Bil Fixed 96\$)		0.5666	0.5628	0.5616	0.5633		0.5755	0.5857	0.5984	
Delivered Price		0.000151	0.000156	0.000151	0.000143		0.000123	0.000114	0.000104	
Rel Cost of Production		0.000253	0.000259	0.000252	0.000239		0.000206	0.00019	0.000173	
Labor Intensity		-5.19E-06	-5.66E-06	-6.02E-06	-6.50E-06		-6.56E-06	-6.14E-06	-5.60E-06	
abor Access Index		0.000179	0.000194	0.000206	0.000214		0.000226	0.00023	0.000233	
Indust Mix Index		2.18E-05	2.60E-05	2.90E-05	3.31E-05		4.22E-05	4.65E-05	5.03E-05	
Reg Pur Coeff (SS over Dem)		0.000148	0.00014	0.000134	0.000131		0.000129	0.000131	0.000133	
mports (Bil Fixed 96\$)		0.1313	0.1323	0.1332	0.1343		0.1377	0.1405	0.1438	
Self Supply (Bil Fixed 96\$)		0.2438	0.2407	0.2392	0.2392		0.2447	0.2503	0.2576	
		0	0	0	0		0	0	0	
Exports to Rest of Nation (Bil Fixed 96\$)	-0.02978	-0.03473	-0.03895	-0.04234	-0.04487	-0.04649	-0.04732	-0.04747	-0.04707	
		0.3576	0.361	0.3648	0.369		0.378	0.3829	0.388	
		-0.01445	-0.01431	-0.01553	-0.01759		-0.02312	-0.02622	-0.02953	